



Focus on Training:

BUILDING THE FOUNDATION

By RDML Don Quinn

The Naval Air Training Command produces the world's finest combat-quality aviators, ready on arrival for tasking in the Global War on Terror. We train them at the right time, in the right number and at the right cost. In 2006, our 723 aircraft logged more than 350,000 flight hours. To put those numbers in perspective, we flew 37 percent of the Navy's flight hours, in 32 percent of its aircraft, with just 10 percent of its flight-operations budget. The best part, cost-wise, is that the 10 percent includes all our maintenance labor costs. We enabled more than 1,500 Navy, Marine Corps, Air Force, Coast Guard and foreign aviators to earn their wings.

There's a significant amount of risk inherent in taking young men and women in their "bulletproof" years and turning them into combat aviators. Our instructors and students spend the bulk of their flight hours in high-traffic terminal environments or congested working areas, conducting practice landings, instrument training, simulated-emergency procedures, low-level navigation, aerobatics, formation flights, car-

rier qualifications and air-combat maneuvering. Despite the risks inherent in this environment, we consistently maintain a lower mishap rate than the Department of the Navy overall. There is, however, always room for improvement. Last year, the Navy as a whole, and CNATRA specifically, experienced a spike in the number of flight mishaps. We lost seven shipmates and four aircraft during fiscal year 2006. We simply refuse to accept these losses as part of doing business, and we fully are committed to the DoD-wide mishap-reduction initiative. The cornerstones of our efforts are Discipline, Standardization and Risk Management.

Discipline is a state of order, based on abiding by rules and authority. NATOPS, operational risk management (ORM), and crew resource management (CRM)





got us where we are today and cannot be forgotten. In addition to the standard naval aviation programs, our instructors also must follow stringent curricula, all while keeping their heads on a swivel and staying one step ahead of their students. “Defensive positioning” is a survival skill used by instructors when teaching new aviators. We have embraced transparency in our operations and look forward to programs such as Military Flight Operations Quality Assurance (MFOQA) coming on line so we further can enhance our effectiveness. Our instructors come from various services and communities and are the epitome of disciplined professionalism.

Standardization ensures every instructor teaches maneuvers to a defined standard, and every fledgling aviator acquires the skills that allow him or her to meet that standard. Deviations from the norm increase risk. Not surprisingly, lack of standardization was identified as a significant factor in our previous mishaps. To counter this factor, we endeavor to prepare, brief and execute with consistency. Our safety and standardization

experts proactively work to identify potential hazards in our training activities. Every TRAWING undergoes a periodic standardization inspection that looks at the entire wing and its squadrons in detail. This inspection covers standardization, safety, NATOPS, production, and maintenance. Safety observers evaluate the command climate and strength of the safety programs.

Risk management means embracing ORM and leaving no stone unturned. Our mission is training, not safety, and flight training involves risk. But, we understand we cannot accomplish our mission if we cannot consistently train safely. Risks are identified and managed at all levels. Hazards are eliminated or mitigated to an acceptable level. We used our recent mishap spike as a catalyst to embark on an all-encompassing review of high-risk maneuvers. Institutional inertia and personnel turnover often leave us with processes that exist only because “that’s the way we’ve always done it.” That belief simply is not acceptable. Every maneuver performed in an orange and white aircraft must teach a skill required by the fleet or required for survivability in the

aircraft we fly. If not, it's an unnecessary risk—period. The completed risk-assessments resulted in hundreds of changes to syllabi and standard operating procedures (SOPs). The vast majority of these changes were minor, but across the board, we now accept less risk while maintaining our high standards. In addition to reviewing high-risk maneuvers, we're working hard to make sure ORM is embraced at all levels.

One of our advantages is the ability to wait out poor weather conditions that add undue risk to completing an assigned training mission. Operational necessity does not exist in CNATRA. We give our instructors great responsibility to safely teach our students. With that responsibility comes the trust they will cancel or amend a flight, based upon existing conditions, including personal readiness. There is no flight in the NATRACOM that cannot be completed tomorrow.

No one is shooting at our aircraft (intentionally), but we deal with other risks not found in the fleet. One of the biggest is student solo flights. Taking low-time pilots and launching them into the wild blue requires special preparation and attention. This is where discipline, standardization and risk management are invaluable. Unlike the fleet, we have many single-engine aircraft. We prepare our students to handle the loss of their only engine and survive. Soloing is a tremendous confidence builder that ultimately improves the quality of our product for the fleet. I'm sure every pilot still remembers that first solo.

A big risk we share with the fleet is the presence of birds and animals. Many mishaps in the NATRACOM are the result of bird strikes. This risk is significant to the T-45, our single-engine jet trainer. We never completely will eliminate the hazard, but we work diligently with our host bases to report bird strikes and constantly improve the local bird-animal strike hazard (BASH) programs.

The greatest challenge in mishap reduction is identifying leading indicators. Traditional mishap statistics tend to be lagging indicators. This situation is akin to driving down the highway, relying solely on the rearview mirror. In addition to standardization and risk management, we encourage hazard reporting to stay ahead of risks that might trigger a mishap. Safety officers throughout NATRACOM have invested significant effort to use the web-enabled safety system (WESS), increasing both the quantity and visibility of hazard reports (hazreps). Most of our hazreps today report mechanical failures. We are working hard to create a climate where human-factor hazreps receive equal attention and visibility. We have made strides in the


right direction but still have a way to go in this area.

We have come a long way in the last 10 years. In 1998, we took too long to train aviators, and we had no reliable reporting system to measure whether we were producing the right number or type of aviators at the right time. We were inefficient and not meeting demand. To address this shortcoming, CNATRA, with significant mentoring by The Thomas Group and CACI, developed the naval aviator production process (NAPP). The result is a dynamic management tool with metrics that enable commanders to make educated decisions regarding how many to train and when, as well as where, to place finite resources for the most payoff. This process reduces the time spent by our young warriors in the training command. NAPP also has the unintended benefit of showing commanders the logjams that have significant safety implications. When training is slowed, students fly less often, lose perishable skills, and become higher risks. In the end, our investment in aviator production process improvement has provided a valuable safety barometer for leadership.

I can't do justice to all the work that went into this effort, but I can tell you it worked. Today, there are no missed fleet seats, and the time to train has been reduced 15 percent from FY99 to FY06. The bottom line is we combined proven industry production-management processes and naval leadership to satisfy fleet needs: producing combat-quality aviators on time, in the right numbers, and at the right cost.

The revolution in training has redefined how we educate and train Sailors and Marines in the 21st century. Training is now focused on students, not hardware. This student-centric approach dramatically is improving the way the Navy considers the capabilities and interests of individuals as the basis for job placement and training. The Navy, through its Human Performance Center (HPC), is using the science of learning to better understand how individuals come to acquire the competencies needed to perform their jobs. We want to create a learning environment that incorporates instruction tailored to the individual's capacity to learn. Another key component of this process is precisely aligning training with job competencies. The knowledge, skills, and abilities a Sailor needs to perform a task will be identified and quantified, so that training becomes more meaningful and more effective. All assumptions about how, where and when we train our professionals are being challenged, and we are taking advantage of what we learn to improve the product, while reducing time to train. As we improve our syllabi, we make sure the science of training has been employed.

In the face of unique challenges and the extraordinary risk exposure inherent in the tremendous number of flight hours flown, the Naval Aviation Training Command has maintained an enviable safety record. We set the foundation for all fleet aviators in the areas of discipline, professionalism and risk management. Here at the headquarters and throughout the wings, we bring

together the unique strengths of the Naval Air Forces and the Naval Education and Training Command to produce the world's finest aviators, ready on arrival for tasking in the Global War on Terror. As always, it's a great time to FLY NAVY! 

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